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# THE NORTHERNMOST STATION OF MAGNOLIA VIRGINIANA, ITS HISTORY AND PRESENT STATUS

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The most northern station of Magnolia virginiana L. is located in the town of Magnolia situated on the mainland of Cape Ann and in the township of Gloucester, Essex County, Massachusetts. The nearest known station to the South is on Long Island, New York. The presence of the plant in Massachusetts has elicited a great deal of interest since the time of its discovery and a number of articles have been written concerning the history and condition of the plants at this station. The best historical account of the species was published in 1916 by Dr. George G. Kennedy in Rhodora vol. 18. In 1928 Richard J. Eaton reported on the status of the species in Rhodora vol. 30. Because over thirty years have elapsed since the appearance of Mr. Eaton's article it seems time to review once more the past history of the Sweet Bay in Massachusetts and report on its present condition. Much of the historical data has been taken either directly from Dr. Kennedy's paper or from the references given in that paper.

In the past there was confusion as to who discovered the Sweet Bay and when it was discovered. John Robinson in his Flora of Essex County, Massachusetts (1880) states, "First brought to notice by Rev. Manassah Cutler during the last century." Prof. John G. Jack (1889) says, "Here it has been known for over a hundred years, having been first brought to notice by the Rev. Manasseh Cutler." Mr. T. Otis Fuller (1890) quotes a marginal

note made by Judge John Davis of Boston in his copy of the first edition of Bigelow's Florula Bostoniensis (1814) to the effect that the first specimen was obtained by Chief Justice Parsons in the summer of 1805. None of these is correct as to the date of the discovery.

In volume two of Cutler and Cutler's Life Journals and Correspondence of Rev. Manasseh Cutler, LL.D. (1888) is information which leaves no doubt as to the discovery. The magnolia was first noticed on Tuesday 22 July 1806 by Chief Justice Theophilus Parsons while riding through the woods in Gloucester during a shower of rain! I regret I have been unable to ascertain whether it was in the morning or the afternoon. Specimens were collected by him on the following Friday. He promptly wrote a letter to the Rev. Manasseh Cutler, the outstanding botanist in Essex County at the time, who set out in search of the plant on Monday, July 28, the day after he received the letter. While having dinner with Captain Ingolson at Kettle Cove a Mr. Goldsmith brought in specimens of the magnolia without being aware that Rev. Cutler was looking for it. In the afternoon Cutler found that the plant was abundant in two swamps close to the road from Manchester to Gloucester.

Being more familiar with Magnolia stellata and M. soulangeana which blossom in the spring, the last half of July seemed a late date to me to find magnolia in flower. However, in checking all the dated specimens I have seen, all collections bearing blossoms have been taken in July and Jack says that the first week in July is the best time to go and see the shrubs.

A note by an unsigned correspondent appears on page 612 of Garden and Forest vol. 2 and again as a quotation in Kennedy's article suggesting that *Magnolia virginiana* is not really native to Gloucester but was introduced there from a more southern state by the early settlers. As far as I know there is not a shred of evidence to support this interesting theory. This note is the major portion of a letter dated 21 November 1889 and sent to John Robinson at the Peabody Academy of Science at Salem by M. A. Walton, "Hermit." This letter is attached to one of the sheets

of Magnolia in the herbarium of the Peabody Museum of Salem. Mason A. Walton, the Hermit of Gloucester, was suffering from very poor health and about 1884 decided that continued life in the city would soon prove fatal, so he moved to the woods of Cape Ann and lived first in a tent and later in a cabin and nursed himself back to health. He was an untrained nature lover with a keen eye, as is evidenced by the contents of this letter and by the book he published in 1903, A Hermit's Wild Friends, which is full of observations he made of the plants, birds and mammals of the region.

The note in Garden and Forest terminates as follows, "It must be evident to any careful observer that Magnolia glauca is here struggling in an unnatural climate. The primary roots grow straight down into the muck and in the fall are thickly covered with succulent rootlets, snowy white in color. In the spring these rootlets are mostly dead, and the greater part of the young shoots die down to the moss, and a certain per cent of the old plants winter kill, which goes to show that there is no harmony between shrub and climate." There is more pertinent information in the unpublished portion of the letter. "Magnolia glauca, does not extend into Essex, so far as I know. I have traveled through many of the swamps of that town without discovering it, and persistent enquiry of Essex people, long ago convinced me that it did not extend beyond West Gloucester. I believe the shrub is confined wholly to Ward 8, City of Gloucester. Below I give the names of some of the swamps where it grows: 'Magnolia Swamp'; 'Barrel Swamp'; 'Rust's Swamp'; 'Cedar Swamp'; 'Bray's Swamp' and several other minor swamps. During the time I have lived here, five years, Magnolia glauca has increased in Magnolia Swamp. I do not think it has noticeably increased in other swamps, but certainly, it has not decreased."

This brings us to a consideration of the range of Magnolia virginiana in New England. In the Trees and Shrubs of Massachetts, ed. 2 (1875), George B. Emerson states, "It is said to have been found, in a single spot, in the county of York, Maine." Since no specimen is known to support this claim and no botanist

has reported finding the Sweet Bay in Maine since 1875, this report can be eliminated. Thus the range can be confined to Cape Ann, Massachusetts. Emerson (1846) reports it from a swamp in deep woods in Essex but there are no specimens to substantiate the claim. Walton, as noted above, believed that the species grew only in West Gloucester and I think this is essentially correct. However, there are two collections in the Gray Herbarium, one made by William Oakes and the other by Charles E. Faxon, which give the adjoining town of Manchester as the locality.

The location of the Magnolia Swamp became well-known soon after its discovery and great numbers of the magnolia were dug and moved to private gardens. During the season when the shrub was in flower large numbers of the blossoms were picked, with little or no regard for the welfare of the plants, and sold on the streets of Salem and Boston. In the herbarium of the Peabody Museum are two sheets of blossoms purchased from small boys in 1878 and 1879. As early as 1846, Emerson expressed the fear that the station would soon become extirpated but nothing was done to remedy the situation. Kennedy quotes a letter written in 1916 by Charles E. Faxon to Walter Deane which states that forty-five years before he had found plenty of good specimens fifteen feet tall or more and that it was easy to find them because the boys who sold the flowers on the Boston trains had made trails from one plant to another all over the swamp. However, when he visited the place two years previously (July 1913) in the company of Dr. Kennedy and the local Tree Warden, they could find only two little plants a few feet high. This must have been the low point of the stand. It is possible that they happened to make their visit at a time when most of the plants had been killed back to the ground by a severe winter and the young shoots had not yet appeared.

Eaton in 1928 notes that the Magnolia Swamp had been made a part of Ravenswood Park in the early 1920's and that the magnolia was at last protected. Along the paths constructed across the swamp he saw about a dozen species. In talking with him recently he told me that he has counted over twenty-five plants close to the paths.

All my visits to Magnolia Swamp have been made in the winter which is not as illogical as it first seems because the ground is then frozen and progress is easy in the swamp and the magnolias being evergreens are easy to spot because they are about the only woody plants there holding their leaves. Besides I would rather fight chilblains than mosquitoes. As Walton states the swamp contains several hundred acres and is long and relatively narrow, ten to over one hundred rods wide. In late February of this year I made a rough census of the distinct plants seen during twenty or twenty-five zigs and zags across the swamp. I was able to count eighty clones and I am sure that I missed some so that it is probably safe to say that at least one hundred still exist. The length of the stems varied from less than a foot to about fifteen feet. I saw no evidence of fruit on any of the plants and this was also true on two previous visits made during the past seven years. This leads me to wonder if the magnolias are now being killed by kindness through being shaded out by the red maples and other taller trees in the swamp which are also being protected. In the fall of 1957, Miss Frances L. Burnett of Manchester told me of another apparently natural stand of Magnolia virginiana in a swamp near the Manchester line and at least a mile and one half from the Magnolia Swamp. I have visited this twice. The swamp itself is small and contains only five or six plants but these represent the only wild magnolias outside of Magnolia Swamp of which I am aware. In 1957, I found several fruit on this group but I saw none this February. — DEPARTMENT OF BIOL-OGY, BOSTON UNIVERSITY, BOSTON, MASS.

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# ALLIUM SPECULAE, A NEW SPECIES OF THE ALLIUM CANADENSE ALLIANCE FROM ALABAMA<sup>1</sup>

## MARION OWNBEY AND HANNAH C. AASE

The *Allium canadense* alliance comprising ten North American species has recently been revised by the authors.<sup>2</sup> Scarcely was this monograph off the press than there appeared in our living collection an undoubted eleventh member of this group. We are indebted to Dr. Carroll E. Wood, Jr., for supplying bulbs and later herbarium specimens of this novelty which we describe below.

Allium speculae, sp. nov. Bulbus ovoideus non bulbuliferens saepe unus ex pugno, tunicis interioribus albidis, cellulis cuticulae indistinctis recte elongatis regularibus, tunicis exterioribus fuscis persistentibus anguste fibroso-recticulatis, maculis vacuis; foliis aliquot canaliculatis in sectione transversa concavo-convexis 1–2 mm. latis integris scapo brevioribus in flore viridibus; scapo uno tereti 2–3 dm. alto; spatha membranacea caudata, bracteis plerumque tribus lanceolatis attenuatis plusminusve connatis plerumque uninervatis; umbella pauci (10–15–) flora erecta, pedicellis tenuibus demum subaequilongis, perianthio plerumque 2–3–plo longioribus; perianthii segmentis 5–6 mm. longis ellipticis obtusis ad apicem involutis pallide roseis late patentibus non valde reflexis in fructu marcescentibus super ovarium conniventibus; staminibus perianthii segmentis paulo brevioribus ascendentibus, filamentis subulatis basi dilatatis coalitisque, antheris oblongis obtusis versatilibus; ovario turbinato trilobato 6-caniculato distincte cristato, cristae processis

<sup>&</sup>lt;sup>1</sup>This investigation was supported in part by funds provided for biological and medical research by State of Washington Initiative Measure No. 171.

<sup>&</sup>lt;sup>2</sup> OWNBY, M., AND H. C. AASE. 1956. Cytotaxonomic Studies in *Allium*. I. The *Allium* canadense alliance. Research Studies of the State College of Washington. Monographic Supplement, No. 1. 106 pp.